State of Iowa
1918

REPORT ON

Public Buildings and Property

FOR THE

Biennial Period Ending June 30, 1918

LOUIS G. LASHER, Adjutant General

Published By THE STATE OF IOWA Des Moines, Iowa

LETTER OF TRANSMITTAL

HON. W. L. HARDING, Governor of Iowa.

SIR: I have the honor to submit the biennial report on the custodianship of public buildings, grounds and property for the period ending June 30, 1918, as compiled from the records of Guy E. Logan, Adjutant General of Iowa, resigned. It is my desire to particularly call your attention to my own recommendation contained herein, and ask your co-operation in bringing same before the 38th General Assembly now in session, to the end that immediate action be taken by them to accomplish the betterment of all conditions at the State Capitol.

LOUIS G. LASHER,
Adjutant General.

Des Moines, Sept. 1, 1918.

ROSTER OF THE DEPARTMENT WITH LAST PAYROLL.

Name	Position	M'thly Salar	
Wm. R. Spry	Chief Engineer	\$165.0	
Chas. Schroppel		119.0	
A. C. Shaffer		110.0	
E. R. Truax	Electrician	119.0	
F. J. Willis		110.0	
W. B. Winder		110.0	
J. W. Kelso		110.0	
		99.0	
Clarence Bogan		110.0	
Geo. McMahon		92.0	
C. T. Merrill		92.0	
Ernest L. Rollins			
Wm, Littler		92.0	
W. M. Fields		92.0	
Joe Czizek		92.0	
I. R. Turner		82.5	
Nelson DeFord	Nightwatch	82.5	
C. O. Titis	Nightwatch	77.0	
C. E. Remington	Yard man	77.0	
W. M. Willoughby		77.0	
Earl Collins		82.1	
A. Brigham		77.0	
George Bosley		77.0	
A. Carter		77.0	
Harvey Darrell		77.0	
James Funk		77.1	
W. P. Glecker		77.0	
		77.0	
George Huss		77.	
George Logan		77.0	
J. F. Offil		77.	
L. M. Randles			
J. M. Russell		77.	
A. W. Scott		77.	
Trueman Stone	Janitor	77.	
C. Vennerstrom	Janitor	77.	
Curtis Van Nordstrand	Janitor	77.	
Claud Land	Janitor		
Findley Cox		77.	
John M. Price		77.	
Mrs. C. W. Boutin		71.	
Elizabeth Allen		70.	
Mrs. Bessie Collins		70.	
MIS. Dessie Comms	minimum Elevator tenter minimumminimum		

PUBLIC BUILDINGS AND PROPERTY

During the biennium the responsibility resting upon the Adjutant General in relation to the care of the capitol building and the grounds of the state and all other state buildings, has been increased by reason of the enlargement of the capitol grounds and the maintaining of a number of offices incident to the war activities of the State of Iowa. The law, which was quoted in the last biennial report of this department, places upon the Adjutant General the duty of the care of the capitol building and other buildings and the furniture and other property connected therewith and "to control and take care of the capitol grounds, walks, fences, trees, shrubbery, statuary and other property of the state on or about the capitol grounds or premises." As the work of enlargement of the capitol grounds has progressed, the responsibility upon the Adjutant General has correspondingly increased.

The original tract for the Iowa State Capitol deeded to this state by W. A. Scott and Harrison Lyon, April 28, 1856, contained 10.02 acres. On this ground is built Iowa's great capitol building which cost, with repairs and partial rebuilding owing to a fire, \$3,296,256. The Historical Building and Library and the Heating and Power Plant and the Document Warehouse, and other improvements cost nearly \$600,000 in addition.

THE CAPITOL BUILDING

The capitol building covers about 59,000 square feet. Other general dimensions are as follows:

Length, North and South, 368 feet, 8 inches. Length, East and West, 246 feet, 11 inches. Height to top of dome balcony, 219 feet. Height to top of ball on dome, 259 feet. Height to top of finial, 275 feet. Diameter of the rotunda, 66 feet, 8 inches. Exterior diameter of the dome, 80 feet.

There are twenty-eight rooms in the basement and thirty on the main floor. The State Library in the west room of the second floor occupies a room in size 53x104 feet with a 45 foot 6

ceiling. The Senate chamber in the South wing is in size 54x94 feet with a 41 foot ceiling. The Hall of the House of Representatives in the North wing is 74x91 feet with a ceiling 50 feet high. The attic and sub-basement contain ventilating fans and the mains—steam, gas and water—compressed air and vacuum pipes, in all, something like forty miles of pipe. The sub-basement is connected to the power plant by a tunnel 8x9 feet in size.

The first act of the general assembly looking to construction of this capitol building was passed April 6, 1868. The corner stone was laid November 23, 1871 and it is 7 feet long, 3 feet wide and 3 feet thick and was made from a prairie boulder of granite procured in Buchanan county. The first session of the general assembly to be held in the building opened January 14, 1884.

The foundation stone for the building was procured from the Bear Creek and Winterset quarries and the stone for the basement story was from near Iowa City. The granite in the base course was procured from prairie boulders gathered in various places in Iowa. The pillasters and piers in the basement are of stone from Anamosa. The red granite columns on the second floor are from Iron Mountain, Missouri. The dome is covered with gold leaf and it has been covered a second time at a cost of about \$3,500. In the Senate there are 787 yards of carpet and in the House chamber 994 yards. Thirteen kinds of wood were used in the construction and twenty-nine kinds of marble. On the interior of the dome, there are a number of statuary figures and beginning with the one just north of the entrance to the library, they are designated as follows: History, Science, Law, Fame, Literature, Industry, Peace, Commerce, Agriculture, Victory, Truth and Progress.

The monument of the Soldiers and Sailors of the Civil War, 145 feet high, erected at a cost of \$150,000, occupies the historic ground of the old temporary State House.

THE PAINTING "WESTWARD"

On the wall of the main corridor, at the head of the grand stair case is the famous decorative painting "Westward" by Edwin Howland Blashfield of New York. Mr. Blashfield's description and interpretation of this picture is as follows: The main idea of the picture is a symbolical presentation of the Pioneers led by the spirits of Civilization and Enlightenment to the conquest by cultivation of the Great West. Considered pictorially the canvass shows a "Prairie Schooner" drawn by oxen across the prairie. The family ride upon the wagon or walk at its side. Behind them and seen through the growth of stalks at the right come crowding the other pioneers and later men. In the air and before the wagon are floating four female figures; one holds the shield with the arms of the state of Iowa upon it; one holds a book symbolizing Enlightenment; two others carry a basket and scatter the seeds which are symbolical of the change from wilderness to ploughed fields and gardens that shall come over the prairie. Behind the wagon and also floating in the air, two female figures hold respectively a model of a stationary steam engine and of an electric dynamo to suggest the forces which come with the later men.

In the right hand corner of the picture melons, pumpkins, etc., among which stand a farmer and a girl, suggest that here is the fringe of cultivation and the beginning of the prairie. At the left a buffalo skull further emphasizes this suggestion.

Considered technically, the dominant motive of the composition of the picture is the festoon or Roman garland. This is carried out by the planes of light color, commencing at the left with the group of spirits, carried downward by the white bodice of the girl gathering flowers, onward through the mass of light in the center, to the white overdress of the girl leading the child and finally toward the right and upward, in the figures of the farmer girl and the spirits of Steam and Electricity. The dark accents in the composition are furnished by the three men grouped together and the skirt of the flower-gathering girl.

The hour chosen for the subject is the late afternoon, since Westward suggests into the setting sun. The scheme of color of the picture is based upon this choice of hour, being in the main made up of orange-pink sunset light and its natural complement bluish shadows, with a few spots of dark blue and red-brown given as aforesaid by the costumes of the men and the skirt of the kneeling girl. For the sake of preserving the integrity of the composition certain liberties have been taken with average probabilities. Thus the driver of the oxen is upon the side which is not conventionally correct, because had he been placed in the correct place in that corner of the canvass he would have thrown the composition out of balance. Advantage was therefore taken of the fact that he might momentarily leave his place. Again, a very small child would not often hurry along keeping up with striding men and women, but on the other hand the children at times undoubtedly did wish and need for exercise sake to run along awhile with the procession. From the point of view of composition, a small mass or figure was needed just at the point where the child is introduced, a dog would have made a spot of about the right height, but two dogs were already in the picture and a figure of a small child therefore served the purpose better.

These remarks about the ox-driver and the small child are added to bring to the notice of the layman the fact that the artist's first duty to his client is to make his picture artistically good, good that is in composition, drawing and color. For the sake of his composition, he may, and indeed should, take advantage of anything which is possible, avoiding only those things which would seem unreasonable to both common sense and imagination.

THE MOSAICS

One of the most interesting art features of the capitol is the series of grand mosaics in the grand stairway directly over the great painting "Westward." These are the largest and most carefully wrought mosaics in America, each panel being about six feet wide by fourteen feet high. The artist, Frederick Dielmann, was employed to make these mosaics. He made a picture of the west front of the state house as a general background for the four central panels, while in the left-hand panel is shown a portion of the state historical building and library, and in the background of the right hand panel is a part of the old state house at Iowa City, which is now the central building at the state university.

The six subjects representing the functions of government, from left to right are:

First. "Defense," represented by two youths leaving their work in the field in answer to a call to arms.

Second. "Charities," represented by a standing female figure, holding a helpless child in one arm while she gives relief to a crippled beggar who kneels at her side.

Third. "The Executive," and fourth "the Legislative" branch of government, etc.

Fifth. "The Judiciary."

Sixth. "Education," typified by a standing female figure, in academic robe, with a wreath of laurel about her head.

The construction of these mosaics is in accord with a very ancient method of making permanent and practically indestructible pictures for great buildings and art galleries. It is as follows:

Frederick Dielmann, the noted artist, several years president of the National Academy of Design of New York, made perfectly finished oil paintings of the subjects, one-third of the actual size of these mosaics. He also made outline drawings on paper the actual size of the panels. He then took the small painting and large drawings to the "Venetian Murano Co.," in Venice and had these mosaics made. In making them the

artisans placed the large drawings on tables and stood the small paintings before them. Then out of thousands of little pigeon holes around the room, the workmen selected the bits of mosaics and laid them in the large outline on the table, copying the small paintings in this manner. These mosaics are made of glass to imitate marble. When the mosaics were all laid, brown paper was pasted over the entire surface. The brown paper surface was then divided into sections, as a state is divided into counties. These sections were then numbered in order, and the paper cut on these section lines. The sections were lifted, placed in boxes and sent to Des Moines. Signor Grandi, who superintended the laying of the mosaics, came with them and placed them on the wall where they are likely to remain for centuries. The wall was given a cost of Portland cement, and the different sections were set in their places. After a few days when the cement had hardened, the brown paper that was pasted over their faces while in Italy, was wet and removed, leaving the mosaic pictures exposed to view for the first time in an upright position.

The reason for using mosaics instead of paint was to get as much of an architectural feeling in these panels as possible, and to avoid conflict or rivalry between them and the Blashfield painting below. Another reason was to give the Dielmann mosaics carrying power enough to overcome the extra distance from the spectator. It will be observed that the mosaics have been made to take up the color and feeling of the architecture about them, while the Blashfield painting in the more conspicuous panels below is more pronounced in color.

DECORATION OF LUNETTES

Around the dome, there are eight decorative paintings on the lunettes by Kenyon Cox of New York. The description of these lunettes by the artist is as follows:

The first function of a decorative painting being to decorate—that is to beautify the building in which it is placed—the first consideration with the artist is a scheme of color and line which shall answer this end. The Rotunda having twelve equal arches, four of them pierced and the others containing the spaces to be painted, the first thought was to avoid monotony and accent the importance of the open arches by placing a single large figure in each lunette, backed against and, as it were, buttressing the open arch, each pair of figures thus establishing a garlanded curve

and the whole series making a continuous rhythm of line about the rotunda. As the statues between the arches, though over life size, looked small, and as a solid figure always looks larger than one of the same size painted on a flat surface, It was determined that the painted figures must be on a large scale. They would measure nine feet high, if standing. These preliminary decisions considerably limited the subsequent choice of treatment; and very little action could be depicted. The depth of the mouldings and richness of shadow in the architecture led to the feeling that considerable force of light and shade and pictorial effect could be properly employed, and that a certain amount of realism in the treatment of backgrounds would apparently enlarge the rotunda and give it space and air without interfering with the sense of stability. In color the effort was to produce a band of beautiful hues which should harmonize with all the surrounding colors while enlivening the general effect; which should have as much variety as possible; and should, at the same time, be unified and, as it were, tied together by certain recurring notes. To this end each of the lunettes takes up and intensifies some one of the colors used in the general scheme of decoration, the reds being most frequently caught up in this way, but the gold and purple and dark blue being accented also. The blue and white of the sky and the green of the landscape are carried through all the lunettes as the unifying notes, and the rather vivid greens were particularly relied on as a contrast to and relief from the dominance of warm tones.

Such being the decorative scheme the choice of subject and treatment was dependent on it. The need for reclining figures and powerful colors in the draperies at once negatived historical or realistic subject and suggested allegory, while a certain amount of freedom of composition and of realistic accessory was permitted. "The Resources of the State of Iowa" was considered, but it was finally determined to embody in the paintings an allegory of "The Progress of Civilization" in any country, some attention to the special conditions of the state determining the treatment in particular cases, but the subject being universal in its application. The series begins at the right of the entrance of the library and continues from left to right around the rotunda. The individual subjects are as follows:

HUNTING—In an open glade of the forest, against a rock and under a pine, reclines the type of primitive man, living by the chase. He holds a lance in his hand and bears a quiver of arrows, and is clothed only in a wolf skin with the scalp down over his head. At his feet sits a wolfish, half-wild dog, man's earliest companion, and a dead wild goose at his side shows his success in hunting. While the figure is necessarily in repose the tenseness of his muscles and the alertness of his glance is intended to convey the impression of instant readiness for action and the same feeling is marked in the listening attitude of the dog.

HERDING—Here the effort has been to combine an illusion to the classic associations of the pastoral life with something of breeziness of vigor essentially modern and western. The herdsman, holding the

pan-pipes and pastoral staff, and clothed with the pastoral cloak and hat, looks sharply off over his right shoulder at something which has attracted his attention. Whatever it is that interests him interests also the cow and the swine, beyond the brow of the hill, who throw up their heads to gaze at it. The scene is a rough hill pasture, with great trees in the distance. The background is a windy blue sky with drifting clouds.

AGRICULTURE—Golden-haired Ceres, sickle in hand, sits in a stubble field and contemplates the harvest. In the foreground are thrown down a rustic cloak and gourd water-bottle. The foliage above her head is rusty and limp with heat, and in the distance is a corn-field with Indian corn in shocks, brilliantly illuminated by the afternoon sun. Beyond it white thunder heads loom into a blue sky. In placing a wheat sheaf behind the principal figure and a crown of oats upon her head an intentional liberty has been taken with the succession of crops in order to suggest that more than one staple is produced in the state.

THE FORGE—The industrial age, the age of coal and iron, is typified in its most simple form by the muscular figure of a young man seated before a rustic forge and studying a working drawing, pinned to a board, of the object he is about to make. This figure is painted entirely nude for delight in the beauty of the masculine figure. It is intended to be purely ideal and in no way to represent a state of society in which men actually went naked. The same thing may be said, generally, of the costume, or lack of costume, in the other panels.

COMMERCE—Commerce is typified by a female figure in gold and white with the winged head-dress and Caduceus of Mercury, God of trade. She leans upon a pile of sacks of grain and directs the Genius of Transportation, in the form of a child, where he shall carry the sack which he bears upon his shoulders.

EDUCATION—Seated upon a bank a mother teaches her child to read from a great book which she holds open before him. In the tranquil land-scape beyond, as elsewhere in the series, the artist has felt at liberty to introduce some features of the landscape he best knows and loves, that of his own country home in New England, but he has so simplified it as to approximate the abstract or universal.

SCIENCE—In this composition the attempt has been to typify the life of the intellect—thought in general, rather than scientific thought in the stricter sense. The scene is the parapet of a house by moonlight. The lamp of truth burns brightly and a single planet shines in the quiet sky. In the left corner is a terrestrial globe, emblem of the world-wide nature of the studies in which the figure is engaged. At the right is a pile of folio volumes—the records of the wisdom of the past. The figure, a stalwart man in draperies of dim blue, is sunk in brooding contemplation.

ART—The culmination of the series, representing the highest form of energy displayed at the zenith of civilization in all ages is "Art." A violincello stands for music, a palette and brushes for painting, a part of a classic building with statues on its sky line for architecture and sculpture, thus symbolizing the four greatest of the fine arts. The figure is a nobly-formed young woman with a face in which the artist has endeavored

to combine innocence and purity with power. She is partially draped in glowing gold and crimson, wears a golden wreath, and holds aloft a mirror of polished metal which reflects to man the light of the sky. This panel has been made as brilliant as possible, in contrast with the grave tone of the "Science." The necessary note of green is supplied by a clump of laurels, the plant of Apollo.

WORK OF THE DEPARTMENT

During the past two years, the department of Public Buildings and Grounds has participated with the department in charge of the capitol extension in making many repairs and improvements necessitated by the clearing of the capitol grounds. It would be impossible to give in detail all of the work done incidental to this improvement of the capitol ground by the force under the Adjutant General, but some of the main features are herewith given.

The entire tract occupied by the state capitol and related buildings by reason of the capitol extension work, now includes about seventy-three acres. Some of the work done by the department in the capitol or in buildings on the capitol grounds is as follows:

Remodeled the flats, known as No. 1005 and 1007 Des Moines Street, for state offices; removed and rebuilt partitions, painted, papered and installed, steam heat and electricity.

Remodeled the flats on East Grand Avenue, known as No. 831-835 for offices, removing and rebuilding partitions, papering, painting, installing furnaces, oil burners and electricity.

Remodeled the home No. 1027 Des Moines Street, for the Governor's mansion, removed and rebuilt partitions, painted, papered, installed water closets, run steam to the building from the steam plant, also electricity.

Built three additional vaults in the attic, north and south of the elevators, installed electricity, built concrete floor and shelving.

Built storeroom third floor north of Senate gallery for insurance department.

Built new steps at the Dairy and Food building, also run steam from the Historical building to Dairy building and set all radiation.

Cleaned and painted the following with the painter that was awarded to the department by the last legislature. The west, south and north corridors of the basement floors, rooms of the secretary of the executive council, rooms of the Adjutant General, Wmen's toilet on basement floor, post office, Board of Control, Horticultural Society, Insurance Department, Red Cross rooms, Men's toilet in basement, Governor's mansion, Waiting room, painted and papered flats at 914-916, 831-833-835 East Grand Avenue, 1005-1007, 1027 Des Moines Street, Dairy & Food building, Banking Department, Supreme Court Book case, Committee rooms No. 6 and No. 8 and the Capitol Extension residence, No. 1409 East Walnut Street and several smaller jobs, too numerous to speak of. The custodian considers the authority to employ a painter one of the greatest steps toward economy and efficiency the state of Iowa has made.

Built the street car waiting room.

Built the partition and cut the door through to the corridor of the Red Cross room; also cut the doorway through, joining the two rooms of the Banking Department.

Shingled and repaired the old Christian church building, Twelfth and Des Moines Street for the Historical Department.

Built thirty lockers and three large window sash with glass for the Historical Department.

Built north wall of 914 and 916 East Grand Avenue; also pigeon hole cases and general repairs to the interior of the building.

Built book case, painted and finished same for the Supreme Court room.

Built screens for the doors in the State House corridors.

Built tables and pigeon hole cases for the Exemption Board, Room No. 22.

Cut door through wall for the Secretary of the Executive Council; also cut a window opening to the corridor, same room.

Made and erected flag pole at the Governor's home.

Removed all steam, electric, gas and water pipes out of the Swanson flats.

Installed new urinals in the men's toilet in basement.

Installed new Western Union Alarm system through the State House, Historical Building, Governor's garage, 1005-1007 Des Moines Street, 831-835 East Grand Avenue and the Dairy and Food building.

The department was ordered by the Executive Council to install the water, drain tile, electricity and electric conduit on the capitol extension. Mr. Spry, chief engineer, took charge of this work and with two of his men—Mr. Willis and Mr. Kelso—all three men of the Custodian's department, they have installed the following:

Rubber insulated and lead encased wire—13,500 feet No. 12 duplex wire; 3,200 feet No. 10 duplex wire; 7,200 feet No. 8 duplex wire; 14,500 feet No. 6 duplex wire; 2,300 feet No. 4 duplex wire; 7,300 feet No. 3 duplex wire; 6,900 feet No. 2 duplex wire; 1,600 feet No. 0 duplex wire; 5,600 No. 2-0 duplex wire.

Rubber insulated and braided wire—850 feet No. 5 stranded; 500 feet No. 4 stranded; 300 feet No. 3 stranded; 450 feet No. 2 stranded; 60 feet No. 0 stranded; 110 feet No. 2-0 stranded; 610 feet 250,000 c.m.; 1,530 feet 300,000 c.m.; 920 feet 400,000 c.m.

Steel conduit—650 feet 3/4" steel conduit; 7,800 feet 1" steel conduit; 2,050 feet 11/4" steel conduit; 5,200 feet 11/2" steel conduit; 6,600 feet 2" steel conduit; 850 feet 21/2" steel conduit; 750 feet 3" steel conduit.

Electric light posts—160 light posts; 650 weatherproof sockets; 650 plug cut-outs.

Tile-1,313 feet various sizes.

Water pipe-13,648 feet.

RECOMMENDATIONS

The law places on me the duty of recommending betterments at state capitol, and in accordance therewith I make the following suggestions to the general assembly:

There is a constantly increasing need for janitor service in the state capitol and other buildings. The number of offices is being increased at nearly every session of the legislature. The enlarged business of the state demands more persons at work in the offices. The need for more janitors is being urged upon the legislators; and I therefore respectfully recommend a readjustment of the force of janitors and that the assignment of janitors to offices and departments be made after conference with the heads of the departments.

Provision should be made for repair work on the capitol, and especially that the decayed parts of the window frames and door frames be replaced, and that much woodwork be cleaned and painted.

There is need of improvement in the rooms occupied by the law library, to provide for better heating in winter. On account of the high ceiling it is almost impossible to keep the library in condition for work in winter. A glass floor on the second balcony might remedy the defect, or there should be provision for office rooms properly enclosed.

The wood ceiling over the senate chamber should be replaced by one of fireproof construction, in order to guard against a great danger from fire.

The iron frames for prism glass both at the capitol entrances and at the engine house should be repaired or supplanted.

Air washers should be again installed in the basement for the purpose of cleaning the air in the ventilators of dirt. Much dirt is now being drawn into the building through the ventilators. In addition to the vacuum plant, there should be a portable vacuum cleaner to reach many places not accessible now.

The tile floor of the building has outlived its usefulness and it should largely be supplanted by more modern floors. The tile is hard to keep in place and because of dirty water running beneath the tiles an unsanitary condition exists. The tile floor of the first story should be taken up, and some of the steam pipes under this floor should be removed. A terrazo floor should be laid.

Electric light fixtures in the office of the governor should be taken out and new and modern electric fixtures be installed, the present ones are old gas fixtures worked over; also new fixtures for the entire first floor.

Electric signs should be placed at the entrances to the two elevators. There is some demand at times for elevators to go to the north and south galleries of the legislative halls, and it would be wise to install two automatic electric elevators.

During legislative sessions there is much confusion at the doors of the chambers, and a part of this might be overcome by having doors cut through from the vestibules into the senate and house cloak rooms.

New draperies or curtains for the windows in the senate and house chambers should be provided. The ones in use now

are old and unsanitary.

The archives department ought to be removed from the upper floor of the historical building, because of the great weight which is accumulating, and be placed on a ground floor. The alley at the rear of the building should be paved, and there is great need of repairs to windows and other woodwork. There should be new doors at the rear of the building.

There should be better provision made for the care of the battle flags. The present cases should be repaired, and there should be immediate provision for the flags of the world war.

Permanent sanitary drinking fountains should be installed in the cloak rooms of the senate and the house; also there should be new and modern urinals in the legislative toilet rooms.

There should be some protection, by railing or otherwise for the windows on the third floor, as there is constant danger when they are open of accidents. New window stops should be installed for most of the capitol.

In the interest of economy steel cases should be purchased for the regular capitol postoffice in the basement floor. Steel fixtures should also be purchased for the legislative postoffice, as the present arrangement was intended to be only tmporary.

FINANCES

The following is the showing of finances of the department:

Cost	of	Sm	on	lies.

Cost of Supplies.		
Paper	\$	418.00
Baskets, brushes and brooms		87.91
Books		.40
Paste, ink, etc		1.02
Sundries, soap, etc.		271.42
	s	778.75
Expenditures for Department.	4	110.10
Salaries	\$	68,650.59
Extra help		683.55
Fuel		32,413.00
Furniture and stores		15,082.20
Telephone and telegraph		126.30
Express, freight, and cartage.		236.73
Miscellaneous expense	***	715.03
Printing by State Printer.	***	27.92
Binding by State Binder		1.20
Paper used by printer		2.07
Supplies		728.81
General Expense.	\$	118,716.50
Furniture and stores for Capitol		19 979 04
Telegraph and telephone		16.40
Express, freight and cartage		45.75
Water and light		4,020.24
Miscellaneous expense		18,803.88
Improvements and repairs		6.123.67
Paving		50,680.16
	-	

\$ 92,064.04

State of Jones

REPORT OF THE

State Highway Commission

FOR THE

Year Ended December 1, 1917

ISSUED BY THE

STATE HIGHWAY COMMISSION

AMES, IOWA

H. C. BEARD, Chairman J. W. HOLDEN, S. W. BEYER,

State Highway Commissioners.

THOS. H. MACDONALD, Chief Engineer.

Published by THE STATE OF IOWA Des Moines



Construction view on road leading from Des Moines to Camp Dodge. This pavement is of monolithic brick construction, 20 feet wide and 8 inches thick. It is five miles in length. The contract was let in September, 1917. This road is being built for the purpose of carrying the excessively heavy military and civilian traffic betwen the city of Des Moines and the army cantonment. The points were previously connected with a gravel road which, under the ordinary traffic was satisfactory, but which proved wholly inadequate to carry the heavy motor trucks and numerous motor cars after the camp was established.